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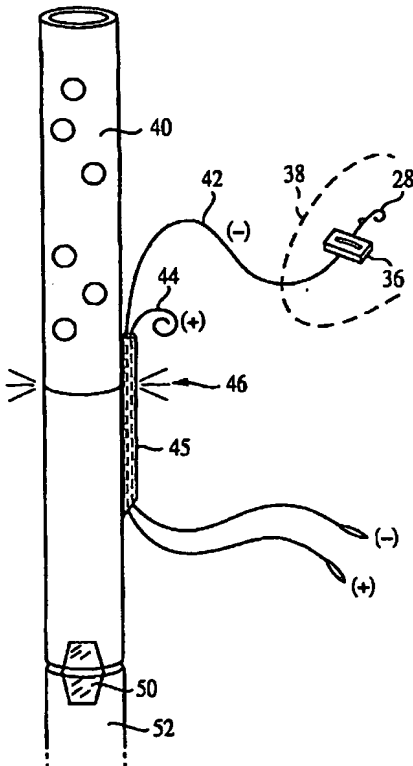
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60/424,537 7 November 2002 (07.11.2002) US(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.(71) Applicant (*for all designated States except US*): AXIOM MEDICAL INC. [US/US]; 555 West Victoria Street, Rancho Dominguez, CA 90220 (US).(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,

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[Continued on next page]

(54) Title: EPICARDIAL HEARTWIRE, CHEST TUBE WITH EPICARDIAL HEARTWIRE, AND METHOD OF USE



(57) Abstract: A heartwire (42) comprises a wire having a proximal end and a distal end, at least part of the distal end being conductive so as to be usable in heart stimulation; and attached to said distal end, an end structure (28) adapted for noninvasively maintaining the distal end in position adjacent the heart. The end structure may comprise an irregular or three-dimensional, atraumatic structure adapted for engaging a surgical material such as pledget secured to the heart, for maintaining said heartwire in position. The end structure may comprise at least one of a pigtail, a hook, a tine and a suture. A second wire (44) may be used for bipolar stimulation. The heartwire may be combined with a chest tube (40), and may be removable therefrom while still maintaining its position relative to the heart.

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SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/35875

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61N 1/05

US CL : 607/126

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 607/126, 116, 119, 125, 129, 149; 128/898; 439/909

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,256,543 B1 (SPENCE) 03 July 2001 (03.07.2001), See entire document.	1, 2, 8, 11, 31
Y		3-7, 9, 10, 12-30, 32
Y	US 6,231,514 B1 (LOWE et al.) 15 May 2001 (15.05.2001), See entire document, especially col. 11, lines 1-21 and 66-67, col. 12, lines 1-35 and Fig. 17.	16-30 and 32

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

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**INTERNATIONAL SEARCH REPORT**

PCT/US03/

**Continuation of B. FIELDS SEARCHED Item 3:**

**EAST**

search terms: temporary pacing, wire, chest, drainage, pledget, anesthesia, suture, catheter.